Twitter Thread by Chuck DeVore

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Much misinformation out there about #Texaspoweroutage, @ERCOT_ISO, wind and solar power, and thermal generators (gas and coal). Let's review what we think we know right now. @TPPF @Life_Powered_ 1/10

Two problems in #Texas, one short term and exacerbated by the long term issue, and one long term. 2/10

The short term failure came at about 1 AM Monday when #ERCOT should have seen the loads soaring due to plummeting temperatures and arranged for more generation. 3/10

Texas came very close to having a system-wide outage for the whole state (ERCOT area, about 85% of the state) due to not arranging for more generation. 4/10

This tripped the grid, knocking some reliable thermal plants (gas and coal) offline. This was a failure of the grid operator (ERCOT) not the power plants. 5/10

In the last 4-5 years, Texas lost a net of 3,000 megawatts of thermal out of a total installed capacity 73,000 megawatts today. We lost the thermal power because operators couldn't see a return on investment due to be undercut by wind and solar... 6/10

...which is cheap for two reasons – it's subsidized and it doesn't have to pay for the costs of grid reliability by purchasing battery farms or contracting with gas peaker plants to produce power when needed, not when they can. 7/10

Meanwhile, Texas has seen a growth of 20,000 megawatts of wind and solar over the same period to 34,000 megawatts of installed capacity (they rarely perform anywhere close to capacity). This subsidized (state and federal) wind and solar have pushed... 8/10

...reliable thermal operators out of business or prevented new generation from being built as operators can't make money off of the market. This reduced the capacity margin – grids must have excess capacity to ensure stability. 9/10

Texas is experiencing what California has – with California affecting the entire Western Interconnection due to its policies. Blackouts are a feature of the push to have more unreliable renewables on the grid. Must pay $$ for reliable backup w/